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## Women's Orgasm Gap as a Function of Precarious Manhood

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Women's Orgasm Gap as a Function of Precarious Manhood

by

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A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts  
Department of Psychology  
College of Arts and Sciences  
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## Abstract

The disparity in frequency of orgasms between men and heterosexual women has been linked qualitatively to women purposefully not communicating their sexual needs in order to preserve their partner's masculinity. In two studies I experimentally evaluated this relationship, sampling heterosexual undergraduate women. In study 1 ( $N = 246$ ) I demonstrated that women who imagined not having an orgasm rated an imaginary partner as more insecure in his manhood, relative to women who imagined having an orgasm or going on a dinner date. These perceptions of insecurity mediated the relationship between not having an orgasm and reporting anxiety about hurting their partner's ego. Additionally, this relationship was moderated by the degree to which women believe manhood must be earned and can be lost through sex. In study 2 ( $N = 282$ ) I predicted women who imagine a partner who is insecure in his masculinity, relative to imagining a secure partner or a control condition, will be less willing to provide open and honest sexual communication, and this relationship would be mediated by anxiety about their partner's ego, a relationship moderated by endorsement of precarious manhood beliefs. My analyses did not reveal support for these hypotheses. Implications, limitations and future directions are discussed.



## Introduction

The *orgasm gap* refers to the disparity in the frequency of orgasms between men and women within heterosexual partnerships. A study among singles found 81.5% of men reported orgasm during sexual activity, compared to 62.9% of women (Garcia, Lloyd, Wallen, & Fisher, 2014), while another study of university students reported 28.4% of women claim to never experience an orgasm during sex, compared to only 2.7% of men, despite similar rates of sexual activity (Wade, Kremer, & Brown, 2005). It is important to note sexual activity includes all sexual activity from which an individual could reasonably expect to achieve an orgasm, including, but not limited to, vaginal intercourse, anal intercourse, manual stimulation and oral stimulation. However, while women have fewer orgasms with their male partners during such sexual activity, there is no difference between men and women in ability to achieve orgasms during masturbation (Hite, 1981), nor do women experience this same disparity in sexual relationships with other women (Garcia et al., 2014). Additionally, the orgasm gap diminishes within committed relationships, although it does not disappear entirely (Armstrong, England, & Fogarty, 2012). Armstrong and colleague's study of undergraduates found women in committed relationships orgasmed 79% as often as men, compared to 32% as often as men in first time hookups, and 49% as often as men in repeated hookups with the same non-committed partner. Thus, considering the similar rates in orgasm achievement during masturbation, the lack of disparity in orgasms between lesbian women and heterosexual men, and the increase of orgasm achievement in long term committed relationships, the cause of this discrepancy appears to be in some part behavioral rather than solely biological.

Although limited in number, existing studies address the roots of the orgasm gap by suggesting an assortment of societal failings from which women suffer. One theory proposes women receive poor sexual education and lack knowledge of clitoral functioning (Wade et al., 2005). Others advocate women suffer from self-consciousness about their genitals and breasts (Algars, Sattila, Jern, Johansson, Westerlund & Sandnabba, 2011). Some suggest women's ability to reach an orgasm is limited by cognitive distraction from negative body image (Meana & Nunnick, 2006; Sanchez & Kiefer, 2007). However, these hypotheses are applicable to women across sexual orientations and therefore do not explain why women in same-sex relationships do not experience the same orgasm deficit as women in relationships with men.

Some research addresses the specific male-female relationship, positing the social responsibility placed on men who lack sexual education about pleasing a female partner, rather than socializing women to advocate for their own sexual needs (Salisbury & Fisher, 2014). Conversely, women may suffer from sexual scripts which prioritize male over female pleasure (Wade et al., 2005). While these studies certainly contribute to the broad understanding of the female sexual experience, they, along with the research suggesting more female-intrinsic obstacles noted above, portray women as passive parties in their own sexual experience.

However, other research addresses a more agentic role, suggesting women may actively choose not to share their sexual needs, in order to protect their partners' ego (Salisbury & Fisher, 2014). Even though sexual communication plays a significant role in a woman's chances of achieving an orgasm (Armstrong, England, & Fogarty, 2012; Davis, Shaver, Widaman, Vernon, Follette, & Beitz, 2006; Kelly, Strassberg, & Turner, 2010), many women purposefully conceal their lack of sexual satisfaction. In fact, approximately 64% of women fake orgasms, with most women specifically citing avoiding the negative consequence of a partner's hurt feelings as their primary reason for faking an orgasm (Muehlenhard & Shippee, 2010). In a qualitative study of

men and women, Salisbury and Fisher (2014) found female respondents reported discomfort with communicating sexual preferences, due to concern surrounding hurting their partner's feelings. One participant is quoted,

[Communication on sexual preferences] is difficult especially since you never know how he's going to respond. Even if you're in a long-term relationship and you've never communicated like that before, it's always hard to initiate it and you don't know how he's going to respond or if he's going to take it offensively if he's not doing something right.  
(p. 622)

Recent research suggests further support for women's concern regarding a potential hit to a male partner's ego. Chadwick and van Anders (2017) measured men's self-reports of both their sense of masculinity and their sense of sexual self-confidence in response to imagining a sexual encounter with a female partner in which she either had an orgasm or did not have an orgasm. They found that when men imagined their partner not having an orgasm, relative to imagining she had achieved an orgasm, they reported lower ratings on items relating to masculinity and they scored lower on the sexual esteem subscale of the Sexuality Scale (SS; Snell & Papini, 1989). The authors suggest women's orgasms serves as a masculinity achievement for men. However, there was no control condition in this study. While a woman's orgasm may boost a man's sense of masculinity, a woman's lack of orgasm may deliver a masculinity hit to a man's ego, leaving a man feeling insecure in his masculine status (both general masculinity and sexual abilities) when he is unable to perform the "masculine duty" of giving his partner an orgasm. Given the responses in Salisbury and Fisher's (2004) study of anxiety and communication, it seems plausible women are aware of this psychological process within their male partners.

Put another way, this concern men are experiencing in response to these threats to their masculinity reflects the cultural ideology of *precarious manhood*. Precarious manhood theory posits manhood is an unstable status which is difficult to win and easy to lose, and that for a man, losing his manhood is an untenable situation (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Therefore, according to precarious manhood theory, men will develop defenses of their masculine status and threats to such will induce stress. In support of this supposition, threats to gender identity predicted anxious cognitions and physiological stress for men, but not for women (Caswell et al., 2014). Gender threats also elicit aggressive thoughts (Vandello et al., 2008) and behaviors (Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009).

Importantly, women and men equally endorse the cultural concept that manhood is precarious (Vandello, et al., 2008). This indicates women are aware that the strength of men's sense of manhood can vary between men and that it can change in response to social situations. Precarious manhood beliefs among women represent the general belief that this is an issue for men. Women vary in the degree of their endorsement of this cultural belief, ranging from fully believing men can lose their manhood to not at all believing this an issue for men.

The ways in which people perceive manhood to be precarious can vary as well. Previously, precarious manhood beliefs have been measured in a global way, assessing people's agreement that manhood is precarious (Vandello et al., 2008). However, the literature described above suggests manhood can be precarious in sex-specific domains. Men report a lower sense of masculinity when they imagine not helping their partner achieve an orgasm, and this masculinity hit is also correlated with a hit to their sexual esteem (Chadwick & van Anders, 2017). Therefore, individual differences in women's precarious manhood beliefs- both global and sex-specific- may be an important moderator of women's responses to sexual situations that are threatening to their partner's manhood.

Considering this fragility of masculine identity and the ubiquity of precarious manhood beliefs, it is unsurprising that women might actively make the decision to prioritize their partner's feelings over their own sexual needs (Salisbury & Fisher, 2004). As noted from the research above, women are very well aware of the tenuous position they are in when their partner's masculinity is at stake, hence their reluctance to share guiding information which might suggest a lack of complete sexual satisfaction. This reluctance is especially understandable if women comprehend the risks of stress and aggression that often arise when men's gender status is challenged. Additionally, this reluctance may be intensified or ameliorated by the degree to which women perceive their partner to be high or low in precarious manhood. Women are unlikely to think of their partner's manhood in these academic terms, yet the work from Salisbury and Fisher suggests women are thinking of their partner's insecurity in response to masculinity-threatening situations. In this thesis I explored this perception of partner's masculine insecurity as a mediator of the relationship between women's sexual experiences and their sexual communication.

Given that women inhibit their sexual communication in response to concerns of their male partner not responding to well to sexual feedback (Salisbury & Fisher, 2004) and the precarious manhood beliefs women endorse, I also predict women's anxiety about hurting their male partner's ego will mediate the relationship between perceptions of a partner's masculine insecurity and their sexual communication. I predict women who perceive their partner as being high in masculine insecurity will report more anxiety. In response to this anxiety they will withhold open and honest sexual communication.

An alternative to anxiety about men's masculine insecurity as a potential mediator of women's reluctance to communicate openly and honestly is women's own shame, embarrassment, or disappointment about not being able to achieve an orgasm. While women

report feelings of shame and embarrassment in response to not being able to achieve an orgasm (Lavie-Ajayi & Joffe, 2009), these feelings appear inwardly-directed and surrounding their own feelings of inadequacy (Lavie-Ajayi & Joffe, 2009). However, these feelings should not mediate the effect of the conditional contrasts of the levels of the manipulation on women's sexual communication. To rule out this alternative I will measure these self-directed negative emotions as an alternative mediator to women's anxiety about their partner.

Women may impede sexual communication in several ways. Women may choose to not communicate at all with their partner, keeping silent their sexual displeasure or their sexual needs. Or, women may choose to offer dishonest feedback. The extreme, yet common, version of this dishonest communication is women faking their orgasm, either during intercourse or by telling their partner after that they had achieved an orgasm when they had not. Additionally, however, women may merely choose to convey they were sexually satisfied from the encounter when they were not or that they did not achieve an orgasm but they do not mind, even if they actually do.

I predicted women will perceive their lack of an orgasm as a threat to a male partner's masculinity that will impede open communication. Through the model below (see Figure 1) I will walk through each individual path of this process. As demonstrated in the model below, I predicted when women imagine not having an orgasm, they will withhold open and honest sexual communication (a). I predicted the influence of this relationship will be carried serially through two mediating factors. First, when women imagine not having an orgasm they will perceive their partner as being insecure in his masculinity (b). Second, considering prior research demonstrating the apprehension women experience at the prospect of hurting their male partner's ego when they are sexually dissatisfied, I predicted women who imagine not having an orgasm will report anxiety about hurting their male partner's ego (c). This relationship between not

having an orgasm and anxiety about their partner will be mediated by perceiving their partner as feeling insecure in his masculinity (d). Moreover, women who perceive their partner as insecure in his masculinity will provide less open and honest sexual communication (e). I predicted this relationship will be explained by the anxiety women will report in response to perceiving their partner as insecure (f). Finally, I predicted that women's existing precarious manhood beliefs will moderate these relationships. Specifically, women who endorse precarious manhood beliefs will be more likely to perceive their partner as insecure in his masculinity in response to her lack of orgasm (g) and they will be more likely to experience anxiety in response to this perception of his insecurity (h).

The full model of the combined studies is illustrated thus:

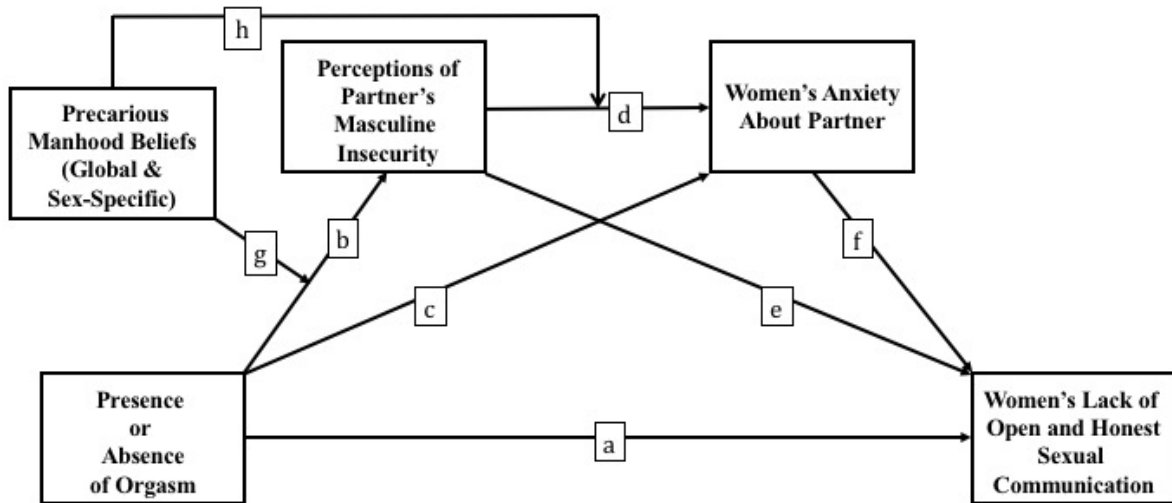


Figure 1. Full model across Study 1 and Study 2.

I proposed two studies to test the proposed causal chain in the above model. The first study tested the link between women's lack of orgasm and their anxiety, mediated by her perceptions of her partner's masculine insecurity. The second study manipulated the proposed mediator from Study 1 (perceptions of partner's masculine insecurity) as the independent variable in Study 2, to test its effect on the proposed dependent variable (communication), mediated by her anxiety. In

both studies, I predicted that women's beliefs about precarious manhood would moderate these relationships.



## Study 1

Study 1 examined women's understanding of how their sexual satisfaction serves as a masculinity achievement for men and the impact of this understanding on women's anxiety. I predicted women who imagine not having an orgasm will perceive their hypothetical partner as being more insecure in his masculinity in response to her lack of an orgasm, which would in turn lead to heightened anxiety in the woman, relative to imagining having an orgasm. I additionally predicted this relationship will be moderated by precarious manhood beliefs. The model specific to Study 1 is illustrated below in Figure 2.

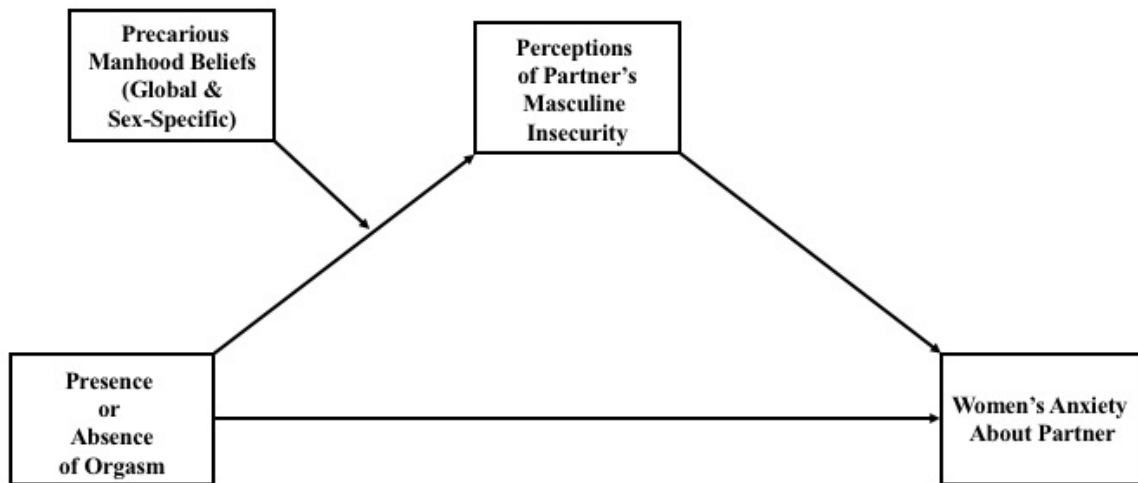


Figure 2. Study 1 hypothesized model of moderated mediation.

My specific hypotheses were as follows:

**H1a:** Relative to having an orgasm or going on a dinner date, not having an orgasm leads women to perceive a male partner as having higher masculine insecurity.

**H1b:** Relative to going on a dinner date or not having an orgasm, having an orgasm leads women to perceive a male partner as having a lower sense of masculine insecurity.

**H2:** The relationship between the presence or absence of an orgasm and perceptions of a male partner's masculine insecurity is moderated by woman's beliefs about precarious manhood such that the relationship will be stronger with greater endorsement of precarious manhood.

**H3:** Relative to having an orgasm or going on a dinner date, not having an orgasm leads women to have greater anxiety.

**H4:** The relationship between the presence or absence of an orgasm and anxiety is mediated by perceptions of the male partner's masculine insecurity.

**H5:** The effect of condition upon women's anxiety via partner's masculine insecurity will be stronger for women higher in precarious manhood beliefs.

### **Participants**

I collected data from 262 heterosexual women from the University of South Florida's SONA participant pool. Only students who are sexually active and not in an exclusive romantic relationship were allowed to participate. Sexual activity was defined as any sexual experiences with another person that involve touching of the genitals in a manner in which women have been known to achieve orgasm. Participation for this study was restricted to women between the ages of 18 and 24.

Out of the 262 participants, I excluded those who did not pass the two attention checks in the survey ( $n = 16$ ), leaving a final sample of 246. See Table 1 for a list of demographics.

### **Measures**

**Imagined Orgasm Exercise (IOE).** Replicating the conditions used by Chadwick and van Anders (2017), participants were randomly assigned to read one of three vignettes in which they imagine a sexual experience with an attractive male partner whom they like very much and with whom they have had sex three times already. These parameters were set to establish a situation in which the relationship is new enough that it would be reasonable not to have much

**Table 1. Demographic characteristics by sample in Study 1.**

Variable		MTurk Sample (n = 246)
Gender	Women	246 (100%)
Age		19.93 (SD = 1.61)
Race/Ethnicity		
	White, European American/ Caucasian	131 (53.30%)
	African/African American/ Black	24 (9.8%)
	Arab American/Middle Eastern	3 (1.23%)
	Asian/Asian American	16 (6.5%)
	Hispanic/Latina American	48 (19.5%)
	Biracial/Multiracial	22 (8.9%)
	Other	2 (.8%)
Sexual Orientation		
	Heterosexual	207 (84.1%)
	Bisexual	39 (15.9%)

information about the precariousness of a partner's manhood, yet not so new that women would likely be hesitant to share any sexual feedback because they are still determining their sexual compatibility with their partner. The vignettes additionally specified the orgasm history of the woman with their imagined partner to establish a clear trend and leave no situational ambiguity. In the control condition there is no mention of sexual activity with this partner.

**Orgasm Condition:** *Imagine you are with an attractive partner who you like very much and with whom you have had sex three times already. Further imagine that you have had an orgasm each time with this partner and your partner is aware of this.*

**No Orgasm Condition:** *Imagine you are with an attractive partner who you like very much and with whom you have had sex three times already. Further imagine that you have never had an orgasm with this partner and your partner is aware of this.*

**Control Condition:** *Imagine you are with an attractive partner who you like very much and with whom you have gone on three dates with already. Further imagine you accept your partner's invitation for a fourth date.*

**Perceptions of Partner's Masculine Insecurity.** Following the experimental condition, participants responded to two scales assessing their imagined partner's masculine insecurity in response to their imagined scenario. These scales were modeled after the measures used by Chadwick and van Anders (2017). The first scale assessed their sense of their imagined partner's sense of masculinity generally. The second assessed their sense of their imagined partner's masculine sexual self-efficacy more specifically. For all analyses, because the scales were almost perfectly correlated, I combined them into one composite measure of masculine insecurity ( $\alpha = .96$ ). For ease of interpretability, I reverse scored the items for masculine insecurity, so that higher scores indicate more insecurity. The items associated with men's sense of masculinity and with men's sexual esteem are described below. The Perceptions of Partner's Masculine Insecurity measure, comprised of the two following subscales, can be found in Appendix A.

*Men's sense of masculinity.* First, participants were asked to indicate how masculine they believe their partner would feel following the imagined scenario. I was not able to acquire the masculinity items used by Chadwick and van Anders (2017). Instead, I drew from previous gender stereotype research, using masculinity items, including "masculine," "manly" "strong," "bold," "competent," and "feminine" (reverse coded) (Rudman, Moss-Racusin, Phelan, & Nauts, 2012; Williams & Best, 1990). The response scale for these items was a Likert scale ranging from Not at all (1) to Extremely (5). In addition to the items assessing participants' perceptions of their imagined partner's masculinity, items also assessed perceptions of partner's general affect. Using the same one to five Likert scale, this measure included affect items of *happy, embarrassed, successful, content, worried, ashamed, accomplished, rejected, and upset*. The purpose of these items was to indicate the extent to which women perceive their lack of orgasm to be concerning to a partner. When discussing the model of this study, these affect items are included in men's sense of masculinity. I predicted women would estimate their partner's sense

of masculinity as lower in the no orgasm condition, and relatively equal in the orgasm and control conditions, demonstrating women believe their lack of an orgasm presents a hit to a man's sense of masculinity, rather than merely a boost from a neutral state when they do have an orgasm.

*Men's sexual esteem.* The hypothetical partner's masculine sexual self-efficacy was measured using the sexual esteem subscale of the Sexuality Scale (SS; Snell & Papini, 1989), as in the Chadwick and van Anders study (2019). The other two subscales of this SS, depression and sexual preoccupation, are unrelated to this design. Originally, this measure asks individuals to indicate their own sexual confidence; however, for the purposes of this study I slightly edited the wording of the items to reflect women's predictions of how their partner might feel. Participants were asked to rate on a five-point Likert-type scale the extent to which they agree (1) or disagree (5) with a series of ten statements about how they think their partner would feel following the imagined vignette. Example items include, "My partner would rate himself as a good sexual partner" and "My partner would not feel very confident in his sexual skills." I predicted women would estimate their partner's sexual esteem as lower in the no orgasm condition, and relatively equal in the orgasm and control conditions, demonstrating women believe their lack of an orgasm presents a hit to a man's sexual esteem, rather than merely a boost from a neutral state when they do have an orgasm.

**Women's Anxiety About Partner.** Participants were asked to indicate on a seven-point Likert-type scale the extent to which they would feel anxiety about the partner's perceived loss of masculinity, with responses ranging from Not at all true (1) to Very true (7) ( $\alpha = .93$ ). An example item of anxiety about partner's loss of masculinity includes, "I would feel anxious about hurting my partner's ego." This 3-item measure of women's anxiety can be found in Appendix B.

**Beliefs about Precarious Manhood.** Participants responded to a measure of beliefs about precarious manhood. This measure included global and sex-specific beliefs about the precariousness of manhood. The global beliefs were assessed through the precarious manhood items used by Vandello and colleagues (2008). This seven-item measure asks participants to indicate the extent to which they personally believe manhood is difficult to achieve and maintain. Example items include “It is fairly easy for a man to lose his status as a man” and “Other people often question whether a man is a ‘real man.’” Additionally, I wrote thirteen sex-specific items to assess the degree to which people believe manhood is predicated upon sexual ability. Example sex-specific items include, “Most men would feel like less of a man if their partner didn’t have an orgasm” and “It is important to most men that they feel that they satisfy their partner in bed. In this model, I measured global and sex-specific precarious manhood beliefs separately as moderators. The Global Precarious Manhood Beliefs measure ( $\alpha = .79$ ) and the Sex-Specific Precarious Manhood Beliefs ( $\alpha = .81$ ) measure can be found in Appendix C.1 and C.2.

#### **Additional Measures:**

**Demographics Questionnaire.** Participants completed a six-item demographics questionnaire that asked about their age, race/ethnicity, year in college, family’s social class, religion, and religiosity. This questionnaire can be found in Appendix G.

**Qualifying Status Questionnaire.** For the purposes of this study, a brief questionnaire was constructed to confirm that participants are not in an exclusive romantic relationship and are currently or have previously engaged in any sexual activity ranging from genital touching to intercourse in the past year. Qualifying sexual activity was not restricted in this study to vaginal intercourse due to a female’s ability to orgasm from many forms of sexual stimulation. This can be found in Appendix H.

**Covariates:** I expected some extraneous variables may also impact women's sexual communication and general responses to sexual situations. For this reason I included three covariates: Gender role orientation, discomfort with casual sex, and body dissatisfaction.

Descriptions of the three covariates are as follows:

**Gender Role Orientation.** I administered a three-item gender role ideology measure, in order to control for traditional values which might lead a participant to feel uncomfortable imagining sex outside of marriage ( $\alpha = .83$ ). Instructions for this measure asked participants to "Please respond to the following statement: When it comes to the roles of men and women my beliefs are:" and then are presented options of Very Traditional to Not at all Traditional, Very Old Fashioned to Very Modern, and Very Conservative to Very Progressive. Responses are across five-point Likert-type scales. This measure can be found in Appendix I.

**Discomfort with Casual Sex.** I asked two questions about discomfort with casual sex. One item asked participants how acceptable they find sex in a new relationship. Responses were on a five-point Likert-type scale ranging from "Very Acceptable" (1) to "Not at all Acceptable" (5). The other item asked participants to respond to the statement, "If women hook up or have sex with lots of people, I respect them less." Responses were on a five-point Likert-type scales ranging from "Strongly Agree" (1) to "Strongly Disagree" (5). This measure can be found in Appendix J.

**Body Dissatisfaction.** I also included the Body Dissatisfaction subscale of the Eating Disorders Inventory (EDI; Garner, Olmstead, & Polivy, 1983) ( $\alpha = .86$ ). This subscale measures dissatisfaction with one's physical body attributes. Questions ask how often the respondent feels dissatisfied with parts of their body and responses are across a six-point Likert-type scale ranging from "Always" (1) to "Never" (6). Originally the EDI is scored using a method of transforming values into a score of 0, 1, 2, or 3 based on severity of response. However, this transformation

method is not considered appropriate for nonclinical populations (Shoemaker, van Strien, & van der Staak, 1993). Therefore, I did not transform the responses. Additionally, for the purposes of interpretation in this study I reverse scored the items that indicated body dissatisfaction (items 1, 2, 6, and 8) such that high scores indicate more dissatisfaction. This measure can be found in Appendix K.

## **Procedure**

Students at the University of South Florida who were enrolled in the university's online SONA system and who met the qualifying restrictions of this study were able to complete the study online. Participants were restricted to taking only one of the two studies. This study counted as .5 NET SONA credits. The completion of this study was estimated to take 10 minutes.

After providing informed consent, participants completed measures of global and sex-specific beliefs about precarious manhood, the proposed moderators. Then, participants were randomly assigned to read one of three vignettes, imagining having an orgasm with a partner, not having an orgasm with a partner, or going on a date with a partner. Participants then indicated how masculine they believe their hypothetical partner felt following the just-imagined scenario of having an orgasm, not having an orgasm, or going on a date. They were next asked to respond to the Sexual Esteem Scale (Snell & Papinni, 1989) by indicating how sexually confident they believe their hypothetical partner would feel. Finally, participants were asked to indicate their own anxiety about their partner's feelings. Covariates and demographics were completed at the end of the survey. Throughout the survey two attention checks were included, instructing participants to select a specific answer choice.



## Results

**Preliminary Data Cleaning and Analysis.** Data from participants who did not pass both attention checks were removed from all analyses. Missing data was handled using listwise deletion across all analyses. Bivariate correlations between all continuous variables are available in Table 2.

**Table 2. Bivariate correlations among all variables in Study 1.**

	1.	2.	3.	4.	5.	6.	7.
<i>Primary Variables</i>							
1. Global PM	1.00						
2. Sex-Specific PM	.41**	1.00					
3. Masc. Insecurity	-.03	.06	1.00				
4. Anxiety	.07	.15*	.43**	1.00			
<i>Covariables</i>							
5. B.D.	.08	-.12	-.08	-.06	1.00		
6. G.R.B.	-.08	-.03	-.06	-.06	.02	1.00	
7. D.C.S.	-.14*	-.12	.01	-.01	.05	.40**	1.00
<i>Mean</i>	4.01	4.55	2.26	3.81	3.50	3.55	3.94
<i>SD</i>	1.03	1.13	1.03	1.85	1.07	.93	.97

*Note.* Global PM = Global Precarious Manhood Beliefs; Sex-Specific PM = Sex-Specific Precarious Manhood Beliefs, Masc. Insecurity = Partner's Masculine Insecurity; Anxiety = Women's Anxiety About Partner; B.D. = Body Dissatisfaction; GRB = Gender Role Beliefs; DCS = Discomfort with Casual Sex. \*  $p < .05$ . \*\*  $p < .01$

**H1a: Relative to having an orgasm or going on a dinner date, not having an orgasm leads women to perceive a male partner as having more masculine insecurity.**

**H1b: Relative to going on a dinner date or not having an orgasm, having an orgasm leads women to perceive a male partner as having less masculine insecurity.**

To test these hypotheses, I submitted ratings of masculine insecurity to a one-way ANCOVA with imagined orgasm exercise as the independent variable and body dissatisfaction, gender role beliefs, and discomfort with casual sex as the covariates. None of the covariates were significant predictors in this model, all  $p$  values greater than .05. There was a significant effect of condition on perceptions of partner's masculine insecurity,  $F(2, 239) = 271.69, p < .001, \eta_p^2 = .70$ . Tukey's test revealed all conditions significantly differed from the other two on the

dependent variable, all  $ps < .001$ . Women who imagined not having an orgasm rated their partner as the most insecure ( $M = 3.40, SE = .06$ ). Women who imagined having an orgasm rated their partner as the least insecure ( $M = 1.41, SE = .06$ ). Finally, women who imagined a nonsexual experience of going on a dinner date gave an insecurity rating in the middle of the other two conditions ( $M = 1.92, SE = .06$ ). The differences between the two conditions relative to the control indicates that women perceive having an orgasm as a masculinity boost and not having an orgasm as a masculinity hit to their partners, supporting Hypothesis 1.

**H2: The relationship between the presence or absence of an orgasm and perceptions of a male partner's masculine insecurity is moderated by woman's beliefs about precarious manhood such that the relationship will be stronger with greater endorsement of precarious manhood.**

I tested the predicted moderation model of Hypothesis 2 using Hayes' (2013) PROCESS macro (Model #1) with 10,000 bootstrapped samples. I entered orgasm condition as the independent variable, dummy coding the control (dinner date) condition as the reference group, and perceptions of partner's masculine insecurity as the dependent variable. I ran this analysis in two ways. Global precarious manhood beliefs and sex-specific precarious manhood beliefs were tested separately as moderators. In each analysis I included the three a priori covariates: women's body image, their gender role beliefs, and their discomfort with casual sex.

Global precarious manhood beliefs did not moderate the relationship between condition and perceptions of partner's masculine insecurity,  $R^2 \Delta = .002, F(2, 236) = .81, p = .45$ .

However, sex-specific precarious manhood beliefs did moderate the relationship between condition and sense of partner's masculine insecurity,  $R^2 \Delta = .01, F(2, 236) = 4.01, p = .02$ .

Specifically, the interaction between sex-specific precarious manhood beliefs and the dinner date versus not having an orgasm contrast was significant ( $b = .25, p = .02, 95\% CI = [.05, .45]$ ). The

interaction between sex-specific precarious manhood beliefs and the dinner date versus having an orgasm contrast was not significant, ( $b = .02, p = .90, 95\% \text{ CI} = [-.19, .22]$ ). When comparing the no orgasm condition to the orgasm condition, sex-specific precarious manhood beliefs also moderated the relationship between the not having an orgasm versus having an orgasm contrast, ( $b = -.23, p = .02, 95\% \text{ CI} = [-.42, -.04]$ ).

Figure 3 shows the simple effect comparisons between the three conditions. Women high in sex-specific precarious manhood beliefs showed a greater increase in ratings of partner's insecurity from the control condition to the no orgasm condition, relative to women low in sex-specific precarious manhood beliefs. Simple effects also revealed that women high in sex-specific precarious manhood beliefs showed a greater decrease in ratings of insecure her partner would feel from the no orgasm to the orgasm condition, relative to women low in sex-specific precarious manhood beliefs. These findings support Hypothesis 2, that women are more likely to perceive their partner as being more insecure in his masculinity when women do not have an orgasm if they are high in sex-specific precarious manhood beliefs.

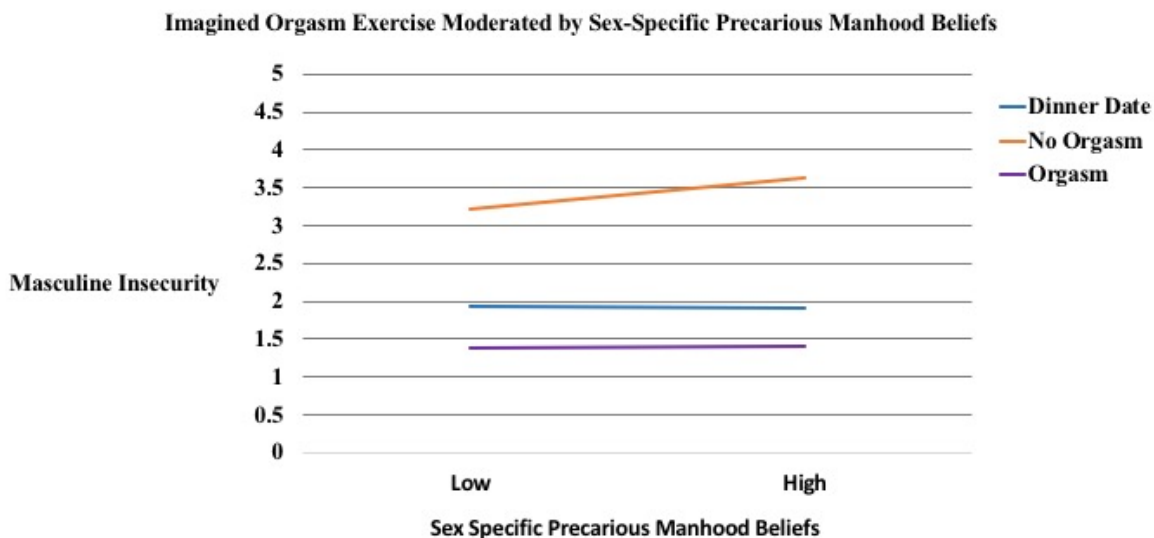


Figure 3. Simple effects of imagined orgasm exercise moderated by sex-specific precarious manhood beliefs on women's perceptions of partner's masculine insecurity.

**H3: Relative to having an orgasm or going on a dinner date, not having an orgasm leads women to have greater anxiety.**

To test these hypotheses, I submitted ratings of women's anxiety to a one-way ANCOVA with imagined orgasm exercise as the independent variable and body dissatisfaction, gender role beliefs, and discomfort with casual sex as the covariates. None of the covariates were significant predictors in this model, all  $p$  values greater than .05.

There was a significant effect of condition on women's anxiety,  $F(2, 239) = 27.87, p < .001, \eta_p^2 = .19$ . Supporting my hypothesis, Tukeys test revealed imagining not having an orgasm ( $M = 4.82, SE = .18$ ) lead women to report greater anxiety, relative to imagining having an orgasm ( $M = 2.87, SE = .19$ ),  $p < .001$  and imagining a dinner date ( $M = 3.70, SE = .19$ ),  $p < .001$ . Additionally, imagining having an orgasm led women to report less anxiety than imagining a dinner date,  $p = .002$ .

**H4: The relationship between the presence or absence of an orgasm and anxiety is mediated by perceptions of the male partner's masculine insecurity.**

**H5: The effect of condition upon women's anxiety via partner's masculine insecurity will be stronger for women higher in precarious manhood beliefs.**

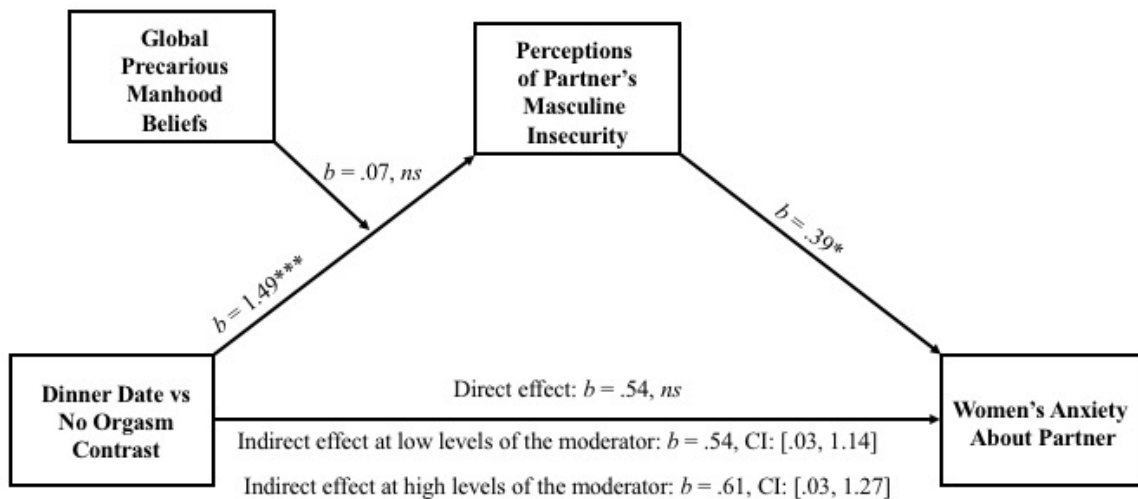
To test Hypotheses 4 and 5, I used Hayes' (2013) PROCESS macro (Model #7) with 10,000 bootstrapped samples. I entered the scenario women imagined as the independent variable, dummy coding the control (dinner date) condition as the reference group. I additionally reran each analysis with the no orgasm condition as the reference group, in order to compare the no orgasm condition to the orgasm condition. I included the three a priori covariates: women's body image, their gender role beliefs, and their discomfort with casual sex. I ran this analysis twice, each with one of the two precarious manhood belief moderators: global or sex-specific.

**Global Precarious Manhood Beliefs.** As shown in Figures 4-6, global precarious manhood beliefs did not moderate the relationship between condition and perceptions of partner's masculine insecurity. However, perceptions of partner's masculine insecurity did mediate the relationship between presence or absence of an orgasm and women's anxiety, supporting Hypothesis 4.

**Sex-Specific Precarious Manhood Beliefs.** This model provided partial evidence supporting my hypothesis of moderated mediation via perceptions of manhood. As shown in Figures 7-9, all conditional contrasts significantly predicted perceptions of partner's masculine insecurity and for all three contrasts perceptions of partner's masculine insecurity mediated the relationship between condition and women's anxiety.

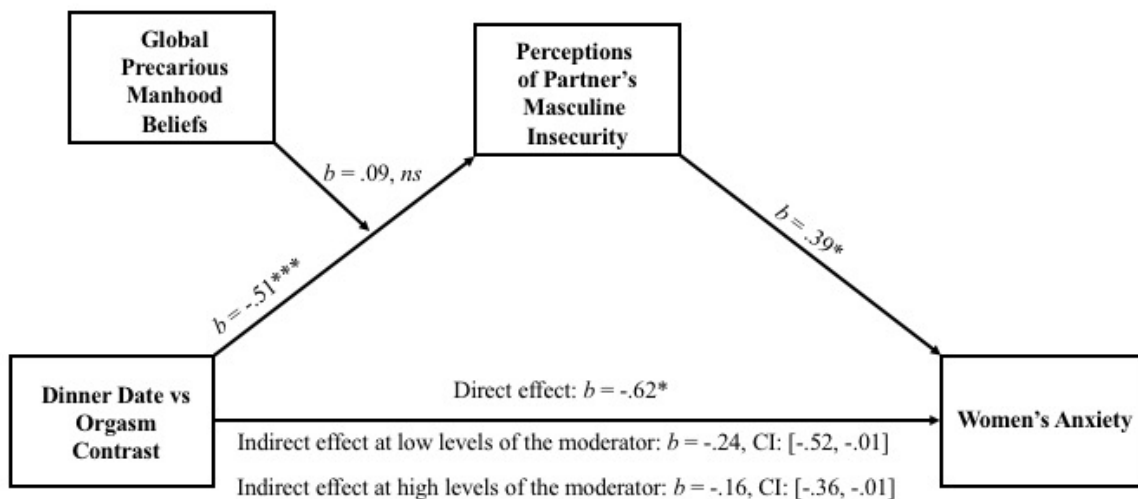
Additionally, sex-specific precarious manhood beliefs moderated the effect of the contrasts of dinner date vs no orgasm on perceptions of partner's masculine insecurity, as well as the effect of the contrasts of no orgasm vs orgasm. Sex-specific precarious manhood beliefs did not moderate the effect of the control vs orgasm contrast on perceptions of partner's masculine insecurity.

However, for all three contrasts the index of moderated mediation was not significant (control vs no orgasm 95% CI: [-.01, .25]; control vs orgasm 95% CI: [-.10, .11]; no orgasm vs orgasm 95% CI: [-.25, .01]). This indicates that the effect of the contrasts on perceptions of partner's masculine insecurity are moderated by sex-specific precarious manhood beliefs, but the conditional indirect effects do not significantly differ at the low and high levels of sex-specific precarious manhood beliefs.



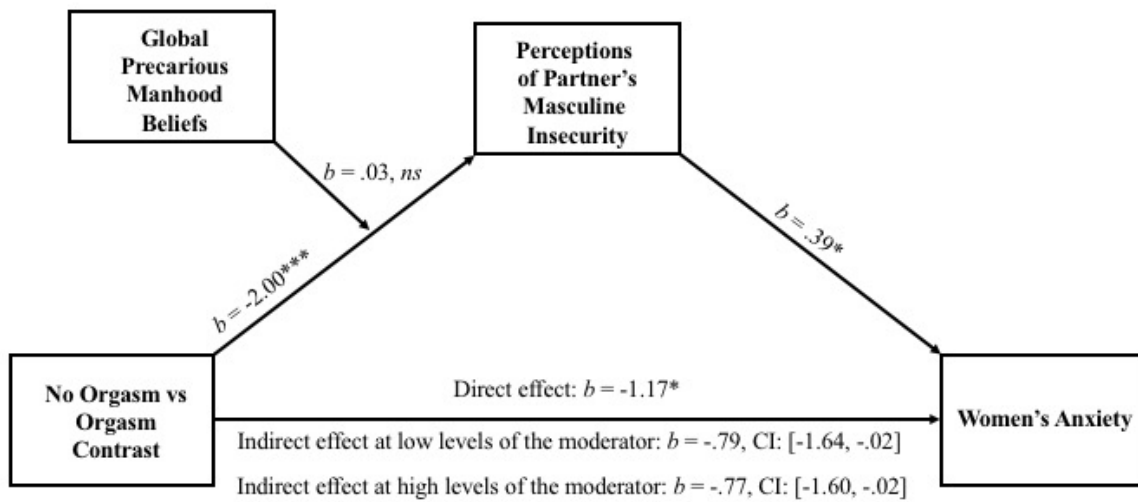
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 4. The effect of control versus no orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by global precarious manhood beliefs.



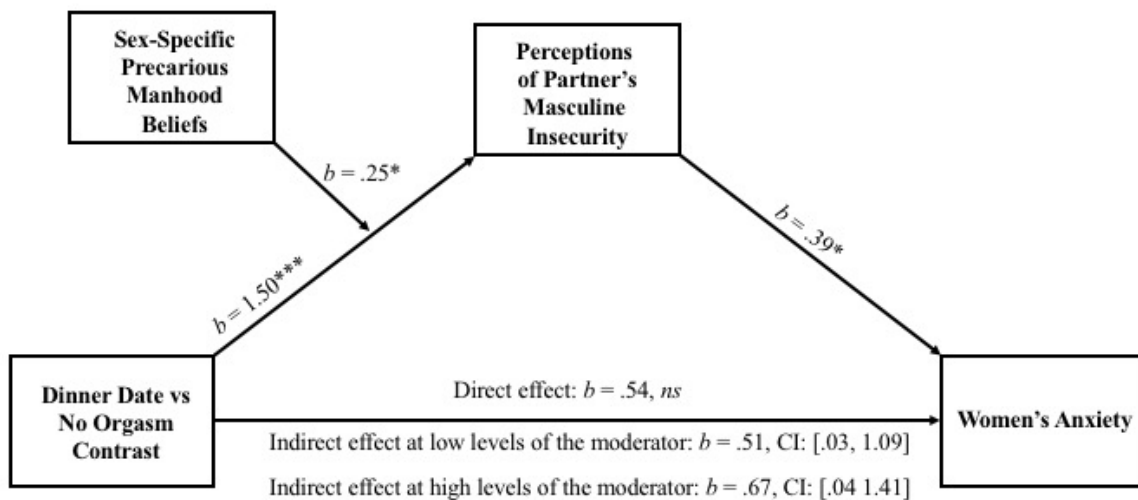
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 5. The effect of control versus orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by global precarious manhood beliefs.



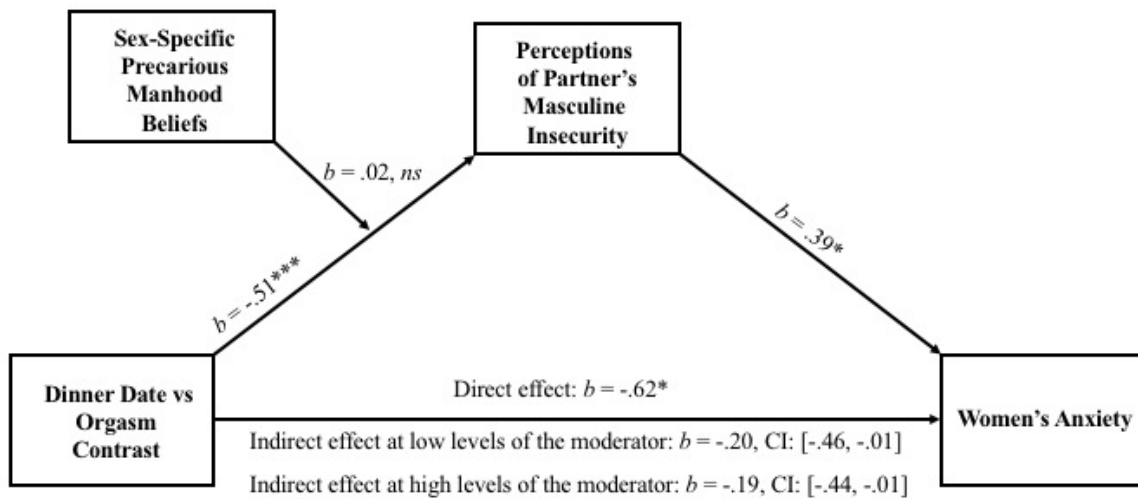
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 6. The effect of no orgasm versus orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by global precarious manhood beliefs.



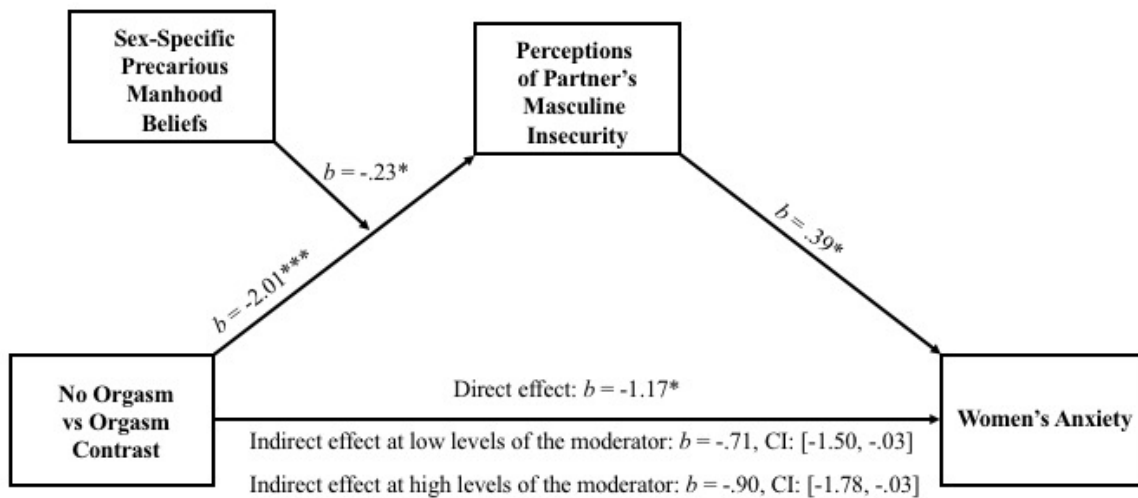
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 7. The effect of control versus no orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by sex-specific precarious manhood beliefs.



Note.  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$

Figure 8. *The effect of control versus orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by sex-specific precarious manhood beliefs.*



Note.  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$

Figure 9. *The effect of no orgasm versus orgasm on women's anxiety about partner via perceptions of partner's masculine insecurity, moderated by sex-specific precarious manhood beliefs.*

## Discussion

Study 1 illustrates a causal relationship between women's presence or absence of an orgasm and their responding affect. In this study, women who imagined not having an orgasm with a partner reported more anxiety about hurting their partner's ego than women who imagined



having an orgasm and women who imagined going on a dinner date. Interestingly, women who imagined having an orgasm reported even less anxiety than women who imagined going on a dinner date, suggesting having an orgasm may provide some amount of security to women in sexual situations with men. Additionally, women's perceptions of their imagined partner's masculine insecurity mediated the relationship between condition and women's anxiety. Women who imagined not having an orgasm, compared to the other two conditions, reported their partner would feel less masculine and less sexually confident, indicating women perceive their own lack of orgasm as a masculinity threat to their male partners. This perception of a masculinity hit predicted women reporting heightened anxiety about hurting their partner's ego. Additionally, sex-specific precarious manhood beliefs moderated this relationship. When imagining not having an orgasm, women higher in sex-specific precarious manhood beliefs, compared to women low in sex-specific precarious manhood beliefs, perceived their partners as being more insecure in their masculinity. Contrary to my predictions, global precarious manhood beliefs did not moderate the interaction of condition and women's perceptions of their partner's masculine insecurity. It is unclear if this is because this scale is not a strong measure of precarious manhood beliefs or if it is because heterosexual women's responses to sexual situations is only impacted by more situation-specific precarious manhood concerns.

Qualitative research suggests heterosexual women have anxiety about communicating with their partners about their sexual dissatisfaction. This study provides the first causal link in a model demonstrating how women's perceptions of their partner's insecurity in his manhood, in conjunction with beliefs that manhood is precarious, leads to this anxiety. In Study 2, I examined how this anxiety, as an outcome of perceptions of a partner's masculine insecurity, may explain women's withholding of open communication that could improve their future sexual interactions with that partner.

## Study 2

Study 2 tested the relationship between perceptions of a partner's masculine insecurity and a woman's sexual communication. I predicted women who imagine not having an orgasm with a partner who is insecure in his masculinity would demonstrate less open and honest communication about their sexual needs and this relationship would be mediated by women's anxiety. The model specific to Study 2 is illustrated below.

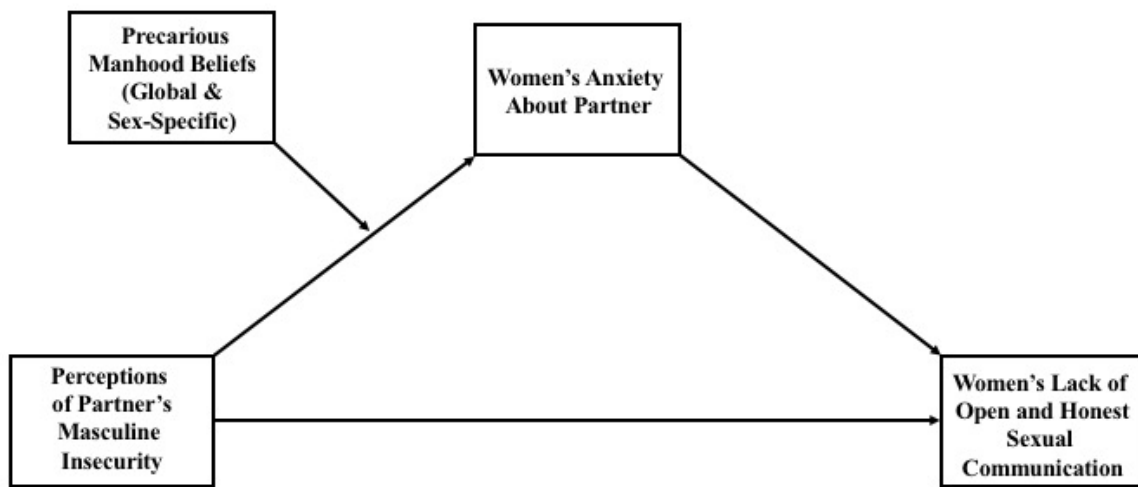


Figure 10. *Study 2 hypothesized model of moderated mediation.*

My specific hypotheses are as follows:

**H1a:** Women in the Insecure Condition, relative to the Secure Condition, will provide less open and honest communication.

**H1b:** Women in the Insecure Condition, relative to the Secure Condition, will feel more anxiety.

**H1c:** There will be no differences in women's anxiety or sexual communication between the Insecure Condition and the Ambiguous Condition.

**H2a:** The relationship between partner's security in his manhood and communication will be mediated by women's anxiety.

**H2b:** The relationship between partner's security in his manhood and communication will not be mediated by women's embarrassment, shame, or disappointment.

**H3:** The mediation will be moderated by women's general beliefs about precarious manhood, such that the proposed relationships will be stronger for those who endorse precarious manhood beliefs.

### **Participants**

I collected data from 301 heterosexual women from the University of South Florida's SONA participant pool. Only students who are sexually active and not in an exclusive romantic relationship were allowed to participate. Sexual activity was defined as any sexual experiences with another person that involve touching of the genitals in a manner in which women have been known to achieve orgasm. Participation for this study was restricted to women between the ages of 18 and 24.

Out of the 301 participants, I excluded those who did not pass the two attention checks in the survey ( $n = 19$ ), leaving 282 women in the final sample. See Table 3 for a list of demographics.

### **Measures**

**Imagined Partner's Masculine Insecurity.** Participants were randomly assigned to read one of three vignettes in which they imagine not having an orgasm with a partner who appears insecure in his masculinity (Insecure Condition), a partner who appears secure in his masculinity (Secure Condition), or a partner with no information about his masculinity security (Ambiguous Condition). To make the partner's (in)security as salient as possible, the high and low conditions demonstrate partner insecurity/security via descriptions of

**Table 3. Demographic characteristics by sample.**

Variable		MTurk Sample (n = 282)
Gender	Women	282 (100%)
Age		19.88 (SD = 1.64)
Race/Ethnicity		
	White, European American/ Caucasian	136 (48.2%)
	African/African American/ Black	24 (8.5%)
	Arab American/Middle Eastern	3 (1.1%)
	Asian/Asian American	20 (7.1%)
	Hispanic/Latina American	74 (26.2%)
	Biracial/Multiracial	17 (6.0%)
	Other	3 (1.1%)
Sexual Orientation		
	Heterosexual	246 (87.2%)
	Bisexual	36 (12.8%)

behavioral cues and explicit instructions that the participant has noticed their imagined partner is either insecure or secure in his manhood. I also created an ambiguous scenario in which the participant has no information about how secure or insecure her hypothetical partner is in his manhood.

**Insecure Condition:** *Imagine you've just had sex with a man you've recently started dating whom you find very attractive and like very much. You didn't have an orgasm because he doesn't seem to know what you need to achieve one. When it's over, as he's lying next to you he looks at you nervously and asks, "Did you come?" You get the impression that he is insecure in his manhood.*

**Secure Condition:** *Imagine you've just had sex with a man you've recently started dating whom you find very attractive and like very much. You didn't have an orgasm because he doesn't seem to know what you need to achieve one. When it's over, as he's lying next to you, he smiles at you, relaxed, and asks, "Did you come?" You get the impression that he is secure in his manhood.*

**Ambiguous Condition:** *Imagine you've just had sex with a man you've recently started dating whom you find very attractive and like very much. You didn't have an orgasm because he doesn't seem to know what you need to achieve one.*

To eliminate any confusion about why the woman did not reach an orgasm in these scenarios, in all conditions participants are told explicitly their imagined partner does not know she has not had an orgasm and her lack of orgasm is a result of her imagined partner's lack of knowledge about her specific sexual needs.

**Women's Anxiety About Communication.** The anxiety measure from Study 1 was repeated in Study 2, as a mediator of the relationship between partner's masculine insecurity and sexual communication. Additionally, in an effort to further explore the source of women's anxiety, I wrote three additional items to assess specific anxiety about sexually communicating. I combined these three anxiety items with the original three anxiety items from Study 1 to create one anxiety measure for Study 2. As these additional items are irrelevant to a dinner date scenario they were not included in Study 1. The three new anxiety about communicating items are "It would worry me that giving my partner sexual feedback might hurt his feelings," "I would feel anxious about telling my partner I want him to do something different in bed," and "I would feel stress thinking about my partner's response to me telling him I don't like how he is doing something in bed." Anxiety across both anxiety measures (from Study 1 and the new items- now combined) was predicted to mediate the relationship between perceptions of partner's masculine insecurity and sexual communication. The reliability for these combined items is  $\alpha = .92$ . This measure of Women's Anxiety about Communication can be found in Appendix D.

**Women's Emotions About Self.** I wrote three items to assess her internally directed feelings, rather than her feelings about his behavior; specifically, how much embarrassment, shame, and disappointment she feels for herself and not for him. An example item is, "I would

feel embarrassed about not having an orgasm.” Response to this measure were on a five-point Likert-type scale ranging from Not at all (1) to Extremely (5). The reliability for this measure is  $\alpha = .91$ . This Women’s Emotions About Self measure can be found in Appendix E.

**Sexual Communication.** Open sexual communication was operationalized as the presence of active communication as well as the truthfulness of this communication. Therefore, I wrote a sexual communication scale comprising six types of open and honest sexual communication for this study. However, combining these into an overall six-item scale was not reliable ( $\alpha = .46$ ). Removing two items (noted in the appendix) increased reliability to a more acceptable alpha ( $\alpha = .69$ ). For the analyses to follow this four-item scale is the sexual communication measure referenced. All items asked the participant to indicate on a five-point Likert-type scale the likelihood that they would engage in the described behaviors, with responses ranging from Not at all likely (1) to Very likely (5). Sexual Communication items can be found in Appendix F.

**Precarious Manhood Beliefs.** The same measures of precarious manhood beliefs used in Study 1 were repeated in Study 2, again as moderators. In this study, global precarious manhood beliefs had a reliability of  $\alpha = .83$  and sex-specific precarious manhood beliefs had a reliability of  $\alpha = .86$ .

**Additional Measures:** The additional measures used in Study 1 (Demographics Questionnaire, Qualifying Status Questionnaire, Gender Role Orientation [ $\alpha = .86$ ], Discomfort with Casual Sex, and Body Dissatisfaction [ $\alpha = .85$ ]) were repeated in Study 2 and used the same way.

## Procedure

Students at the University of South Florida who were enrolled in the university's online SONA system and who met the qualifying restrictions of this study were able to complete the study online. Participants were restricted to taking only one of the two studies. This study counted as .5 NET SONA credits. The completion of this study was estimated to take 10 minutes.

After providing informed consent, participants completed measures of global and sex-specific beliefs about precarious manhood, the proposed moderators. Then, female participants responded to the two measures of beliefs about precarious manhood, the proposed moderators. Next, participants were randomly assigned to read one of three vignettes, imagining not having an orgasm with a partner who appears insecure in his manhood (Insecure Condition), a partner who appears secure in his manhood (Secure Condition), or a partner with no information about his manhood security (Ambiguous Condition). Here perceptions of masculine insecurity were manipulated as the independent variable, rather than as a measured variable as in Study 1. Participants then indicated their own imagined anxiety about their partner. Additionally, to test a competing mediator, participants reported self-directed negative emotions they might experience, including disappointment, embarrassment, and shame. Finally, participants indicated the likelihood of inhibiting open and honest communication. Covariates and demographics were completed at the end of the survey. Throughout the survey two attention checks were included, instructing participants to select a specific answer choice.

## Results

**Preliminary Data Cleaning and Analysis.** Data from participants who did not pass both attention checks were removed from all analyses. Missing data was handled using listwise

deletion across all analyses. Bivariate correlations between all continuous variables are available in Table 4.

**Table 4. Bivariate correlations among all variables in Study 2.**

	1.	2.	3.	4.	5.	6.	7.
<i>Primary Variables</i>							
1. Global PM	1.00						
2. Sex-Specific PM	.39**	1.00					
3. Anxiety	.10	.44**	1.00				
4. Lack of Comm.	.09	.09	.42**	1.00			
<i>Covariables</i>							
5. B.D.	-.03	-.08	-.25**	-.24**	1.00		
6. G.R.B.	-.21**	-.04	-.01	-.24**	.10	1.00	
7. D.C.S.	-.16**	-.01	-.01	-.05	.03	.45**	1.00
<i>Mean</i>	4.08	5.13	4.73	2.83	3.59	3.63	4.06
<i>SD</i>	1.26	.96	1.48	.90	1.03	.95	.91

*Note.* Global PM = Global Precarious Manhood Beliefs; Sex-Specific PM = Sex-Specific Precarious Manhood Beliefs; Anxiety = Women's Anxiety About Partner; Lack of Comm. = Women's Lack of Open and Honest Sexual Communication; B.D. = Body Dissatisfaction; GRB = Gender Role Beliefs; DCS = Discomfort with Casual Sex. \*  $p < .05$ . \*\*  $p < .01$

**H1a: Women in the Insecure Condition, relative to the Secure Condition will provide less open and honest communication.**

**H1b: Women in the Insecure Condition, relative to the Secure Condition, will feel more anxiety.**

**H1c: There will be no differences in women's anxiety or sexual communication between the Insecure Condition and the Ambiguous Condition.**

To test these hypotheses, I submitted ratings of women's anxiety and sexual communication to a one-way MANCOVA with partner's masculine insecurity as the independent variable and body dissatisfaction, gender role beliefs, and discomfort with casual sex as the covariates. One of the covariates, body dissatisfaction, was a significant covariate in the model, predicting both anxiety,  $F(1, 276) = 18.57, p < .001$  and sexual communication,  $F(1, 276) = 15.12, p < .001$ . Additionally, gender role beliefs predicted sexual communication,  $F(1,$



276) = 4.61,  $p = .01$ . Gender role beliefs did not predict anxiety,  $F(1, 276) = .07, p = .85$ , nor did discomfort with casual sex predict either dependent variable,  $ps < .05$ .

This analysis failed to find evidence supporting my hypothesis, with no significant effect of condition,  $F(4, 584) = 1.01, p = .40$ , Wilk's  $\Lambda = .99$ . Women did not significantly differ by condition in their dishonest anxiety (Insecure  $M = 4.74, SE = .14$ ; Secure  $M = 4.83, SE = .14$ ; Ambiguous  $M = 4.51, SE = .15$ ). Women in this study also did not significantly differ by condition in their sexual communication (Insecure  $M = 2.82, SE = .09$ ; Secure  $M = 2.95, SE = .09$ ; Ambiguous  $M = 2.75, SE = .09$ ).

**H2a: The relationship between partner's security in his manhood and communication will be mediated by women's anxiety.**

Using the Hayes' (2013) PROCESS macro (Model #4) with 10,000 bootstrapped samples, I tested the indirect effect of partner's security in his manhood on women's anticipated sexual communication, via women's anxiety. I entered the scenario women imagined as the independent variable, dummy coding the insecure condition as the reference group. I included three a priori covariates: women's body dissatisfaction, their gender role beliefs, and their discomfort with casual sex.

The mediation analysis did not reveal evidence to support this hypothesis. There were no significant indirect effects of perceptions of partner's security in his manhood on the comparison between the insecure and ambiguous condition (95% CI = [-.14, .04]) nor on the comparison of the insecure and secure condition (95% CI = [-.07, .11]).

**H2b: The relationship between partner's security in his manhood and communication will not be mediated by women's embarrassment, shame, or disappointment.**

Using the Hayes' (2013) PROCESS macro (Model #4) with 10,000 bootstrapped samples, I tested the indirect effect of partner's security in his manhood on women's anticipated

sexual communication, via women's emotions about self (using a combined variable of shame, embarrassment, and disappointment). I entered the scenario women imagined as the independent variables, dummy coding the insecure condition as the reference group. I included three a priori covariates: women's body dissatisfaction, their gender role beliefs, and their discomfort with casual sex.

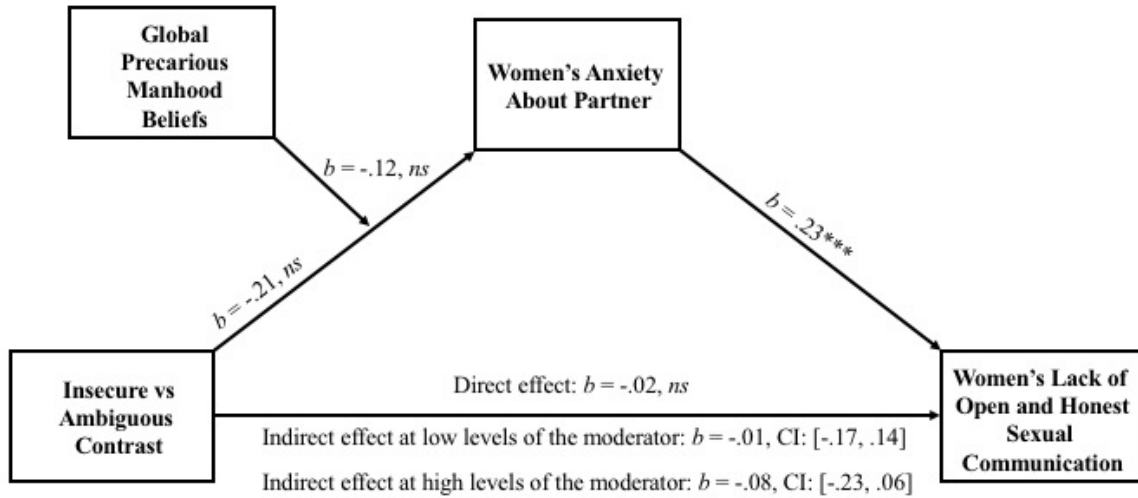
The mediation provided support for this hypothesis, by finding no significant indirect effects of perceptions of partner's security in his manhood on the comparison between the insecure and ambiguous condition (95% CI = [-.07, .05]) nor on the comparison of the insecure and secure condition (95% CI = [-.01, .13]). However, in the absence of a direct effect of condition on communication, and in the absence of a mediated indirect effect through anxiety about partner, this non-effect is not very meaningful.

**H3: The mediation will be moderated by women's general beliefs about precarious manhood, such that the proposed relationships will be stronger for those who endorse precarious manhood beliefs.**

Using the Hayes' (2013) PROCESS macro (Model #7) with 10,000 bootstrapped samples, I tested the moderating effect of precarious manhood beliefs on the indirect effect of partner's security in his manhood on women's anticipated sexual communication, via women's anxiety. I entered the scenario women imagined as the independent variables, dummy coding the insecure condition as the reference group. I included three a priori covariates: women's body dissatisfaction, their gender role beliefs, and their discomfort with casual sex. I ran this analysis twice, once using global precarious manhood beliefs and once using sex-specific precarious manhood beliefs.

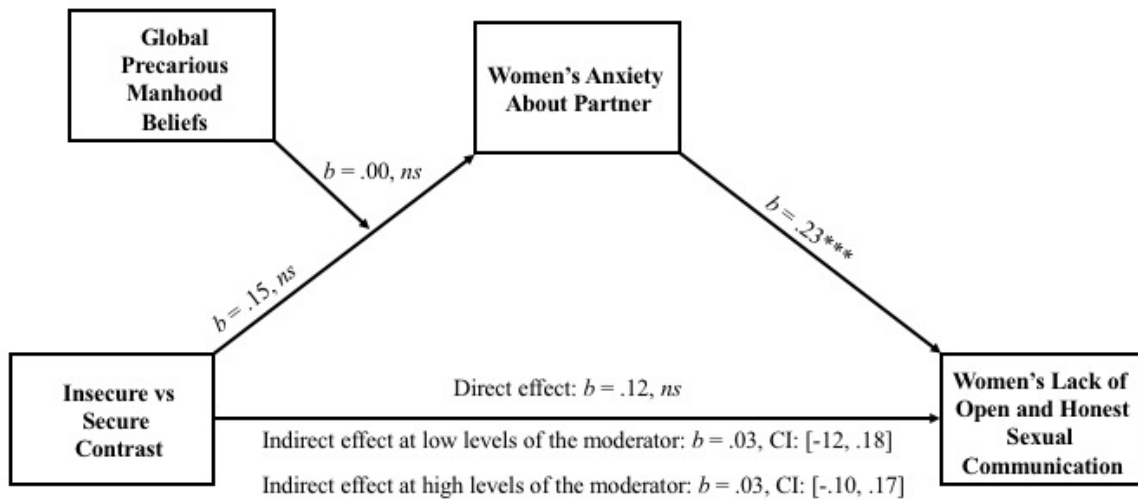
As shown in Figures 11-12, Global precarious manhood beliefs did not moderate the relationship between condition and anxiety. As shown in Figures 13-14, sex-specific precarious

manhood beliefs also did not moderate the relationship between condition and anxiety. Additionally, the mediation analyses remained insignificant when entering precarious manhood beliefs as a moderator.



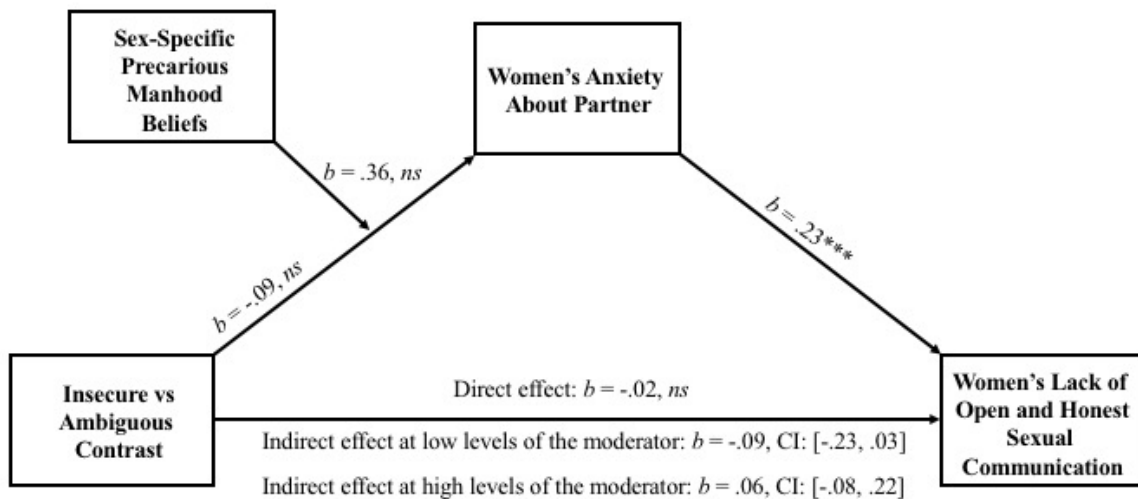
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 11. *The effect of insecure versus ambiguous on women's lack of open and honest sexual communication via women's anxiety about partner, moderated by global precarious manhood beliefs.*



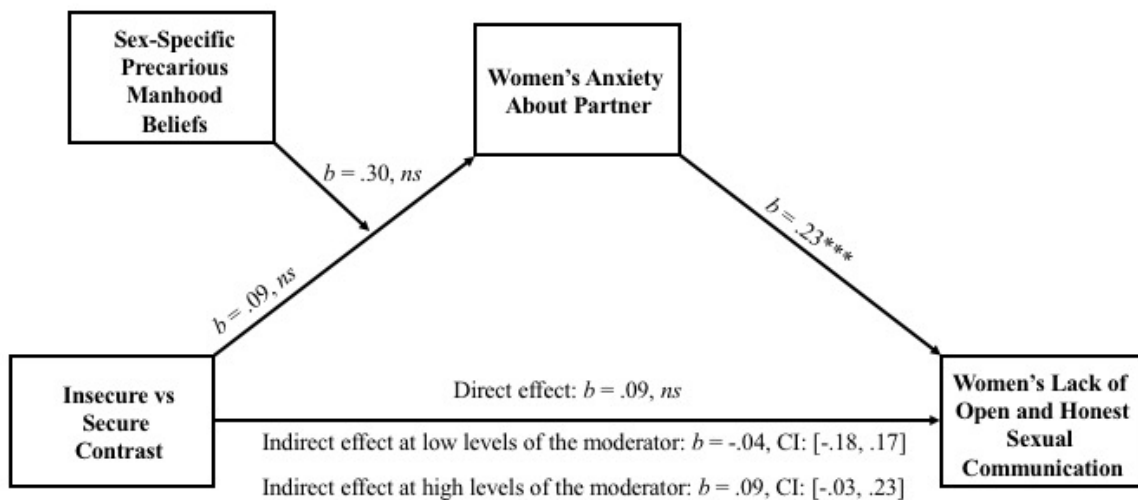
Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 12. *The effect of insecure versus secure on women's lack of open and honest sexual communication via women's anxiety about partner, moderated by global precarious manhood beliefs.*



Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 13. *The effect of insecure versus ambiguous on women's lack of open and honest sexual communication via women's anxiety about partner, moderated by sex-specific precarious manhood beliefs.*



Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Figure 14. *The effect of insecure versus secure on women's lack of open and honest sexual communication via women's anxiety about partner, moderated by sex-specific precarious manhood beliefs.*

## Discussion

Previous research links women's sexual communication with their partners to their rates of orgasms. Study 1 found when women imagine not having an orgasm they rate their male partners as more insecure in his masculinity and that this rating predicted women's anxiety about

hurting their partner's ego. Study 2 attempted to link this perception of insecurity, and its subsequent anxiety, to women withholding open and honest sexual communication from their partners. Women were instructed to imagine not having an orgasm with a man who was either secure or insecure in his manhood (or about whom there was no information about his security.)

All analyses failed to find support for my hypothesis. Women did not vary by condition in their anxiety about hurting their partner's ego, nor did they vary in their anticipated sexual communication. It is unclear why this study failed to replicate the relationship in Study 1 between perceptions of a partner's masculine insecurity and anxiety about hurting his ego. It is possible women in the study found the imagined exercise unclear or that the manipulation was not strong enough to induce anxiety in them. Further exploration is needed to assess if this relationship can be found with a better manipulation of women's imagined experiences.

## General Discussion

The proposed research sought to address one possible facet of the disparity in orgasms between men and heterosexual women, a phenomenon known as the orgasm gap. The orgasm gap has been linked to women's sexual communication (Armstrong, England, & Fogarty, 2012; Davis, Shaver, Widaman, Vernon, Follette, & Beitz, 2006; Kelly, Strassberg, & Turner, 2010). Qualitative research finds women withhold their sexual communication due to concern about hurting their male partner's ego. (Salisbury & Fisher, 2014). Both men and women view manhood as precarious- something that must be achieved and can be easily lost (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). When men imagine their female partner not achieving an orgasm they demonstrate this precariousness, by reporting feeling less masculine and secure in their sexual capabilities (Chadwick & van Anders, 2017).

I proposed women are aware of the threat not having an orgasm poses to their male partner's masculinity, leading to anxiety and thus motivating them to withhold the sexual communication which could improve their future sexual experiences with their partner. Furthermore, I proposed these relationships would be greater for women who endorse precarious manhood beliefs, both globally and sex-specific. I took this serial moderated mediation model and deconstructed it into two studies in order to experimentally manipulate each stage of the model. Through a series of two studies I tested (1) the causal effects of not having an orgasm, compared to having an orgasm or a neutral situation, upon women's perceptions of an imagined male partner's masculine insecurity and women's anxiety about hurting their partner's ego and (2) the causal effects of perceiving an imagined male partner as insecure in his masculinity,

compared to secure or having no information, upon women's anxiety about hurting their partner's ego and their sexual communication.

Study 1 provided support for the first stage of the model, finding women do indeed perceive their not having an orgasm as a masculinity hit to their partner. Women who imagined not having an orgasm reported their partner would feel less secure in his masculinity, relative to those who imagined having one and those who imagined a neutral dinner date situation. Women who imagined not having an orgasm also indicated they would feel more anxiety about hurting their partner's ego. Perceptions of partner's masculine insecurity mediated this relationship between women imagining not having an orgasm and their anxiety.

Additionally, sex-specific precarious manhood beliefs moderated this relationship. Women high in sex-specific precarious manhood beliefs had a greater increase in ratings of partner's anxiety, moving from the orgasm to no orgasm condition and moving from the dinner date to orgasm condition. This indicates women high in sex-specific precarious manhood beliefs may be more likely to perceive manhood as something that can be lost for a man who fails to give his partner an orgasm.

I also tested whether global precarious manhood beliefs moderated this relationship, but this scale did not moderate the relationship between condition and perceptions of partner's insecurity. Perhaps women evaluations of their partner's insecurities in sexual situations are only affected by perceptions of manhood that are context-specific to sex. It may be that global precarious manhood would be a stronger predictor of women's evaluations of their male partners in non-sexual situations. Alternatively, further development of a global measure of precarious manhood beliefs may be needed.

Study 2 attempted to causally demonstrate that when women perceive their male partners as insecure they are more likely to withhold sexual communication. This study failed to find

evidence for this hypothesis. Women who imagined not having an orgasm with an insecure partner did not differ in their scores of anxiety or communication from women who imagined a secure partner or from women who imagined a partner about whom nothing was known in regards to his security. Neither sex-specific nor global precarious manhood beliefs interacted with the experimental condition.

Study 2's failure could be due to a number of factors. First, the sexual communication scale was not very reliable, which may explain the lack of relationship between communication and both the condition and the mediator. However, this type of research illustrates a broader challenge. It is difficult to create a compelling and believable scenario that succeeds in transporting women into an imaginary situation. Maybe women found the scenarios difficult to imagine or unbelievable. It also could be the scenarios were not strong enough to elicit true emotional and behavioral responses. Perhaps in the scenarios used in this study the imaginary male partner who was supposed to be secure came off as arrogant or presumptuous. Perhaps merely asking if a woman had an orgasm suggests insecurity, overwhelming any information to the contrary. Future research will require writing and testing more scenarios to best experimentally alter women's perceptions of an imaginary partner.

**Implications.** This study provides causal evidence that women respond with anxiety to sexual situations which may be threatening to their male partners. It is the first to experimentally explore how women's beliefs about manhood may affect their romantic and sexual relationships, or their behavior at large. The evidence from Study 1 suggests women modify their interactions with their male partner based not just on their perceptions of the partner as an individual but also based on their own conceptualizations of manhood. This finding has implications for relationships beyond sexual communication, including general communication, perceptions and interpretations of partners' behaviors, and even early courtship behaviors.



Additionally, the relationship between women's perceptions of their partner's masculine insecurity and their own anxiety about hurting their partner's ego implies women's continued struggles with attaining an orgasm may sometimes require an intervention of the couple, rather than the individual. If women's anxieties about her partner affect her sexual satisfaction (either by limiting sexual communication or by carrying that anxiety over into their next sexual encounter) then it may require a third party to facilitate productive conversations around anxiety and perceptions of masculine insecurity. Despite failing to find evidence in this study that women withhold information about their sexual experience from their partner in response to perceptions of masculinity and manhood, these findings still have implications for couples therapy and sex therapy. Any situation between two intimate people that causes one to have anxiety is worth exploring as a source of disruption to the relationship and an impediment of healthy communication.

**Limitations.** First, this research was limited to a sample of undergraduate women. Young women may be more inexperienced than their older peers, which undoubtedly affects gender stereotypes and sexual communication. This study was also limited by the use of unvalidated measures of anxiety, communication, and precarious manhood beliefs. Further development of appropriate measures is needed to continue this work.

Imagined scenarios are limited in realism and believability. Both studies relied on artificial manipulations of real-life scenarios. Although I made efforts through informal piloting to create realistic and believable scenarios, these manipulations may not adequately represent the real world, or they may not adequately elicit real-world responses. Beyond asking women to imagine hypothetical situations, these studies asked them to imagine hypothetical partners, with whom they had no history, nor connection.

For these studies participants were required to be single; however, women may rely upon past experiences with previous partners to respond to the subsequent questions, tainting the desired image of the imaginary partner. It may even be that my hypothesis that women's perceptions of their partner affects their anxiety and communication is incorrect. Instead, it could be that women always rely more upon past experience in making judgments about sexual communication than they do on information from their present partner.

Additionally, even if women's precarious manhood beliefs and perceptions of their partner's masculine insecurity do affect their sexual communication, these factors may still play a relatively small role in explaining the orgasm gap. These studies did not include other factors predicting sexual communication or sexual satisfaction as alternative predictors. If future research does succeed in linking women's perceptions of their partner's masculine insecurity and their precarious manhood beliefs to their rates of orgasms, further research would still be needed to compare the relative contributions of the various factors implicated in explaining the orgasm gap.

**Future Research.** This sample was a snapshot of one side of a two-sided relationship. In reality, women's feelings and behaviors are in response to real people with whom they have a connection and history, or at least have actually met. I conducted these studies in this manner in order to experimentally manipulate perceptions that cannot be altered within an existing relationship. However, future research should seek greater ecological validity by investigating this pattern of behaviors in real couples. Specific follow-up studies should assess a) how many women are aware of the potential precariousness of their partner's manhood, b) how accurate are heterosexual women at gauging the strength of this precariousness, and c) if and how this awareness actually impacts sexual communication within existing couples. Additionally, in order to create a complete picture of the impact of precarious manhood on women's orgasm

rates, it is necessary for further research to address the impact of a man's precarious manhood on his own sexual communication. While findings from this study are not expected to completely account for the orgasm gap, they may dovetail with existing literature to provide a more holistic and nuanced understanding of the phenomenon.

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## Appendices

## Appendix A: Perceptions of Partner's Masculine Insecurity

### Men's Sense of Masculinity.

Using the scale below, please indicate how you believe the partner you just imagined would feel in that scenario.

1                      2                      3                      4                      5  
Not at all      Slightly      Moderately      Very      Extremely

- Masculine (r)
- Happy (r)
- Manly (r)
- Embarrassed
- Strong (r)
- Successful (r)
- Rejected
- Bold (r)
- Content (r)
- Upset
- Competent (r)
- Worried
- Feminine
- Ashamed

### Men's Sexual Esteem.

Using the scale below, please indicate how you believe the partner you just imagined would feel in that scenario by indicating the extent of your agreement or disagreement with each statement.

1                      2                      3                      4                      5  
Agree      Slightly Agree      Neither Agree nor Disagree      Slightly Disagree      Disagree

- My partner would rate himself as a good sexual partner
- My partner would rate his sexual skill quite highly
- My partner would feel he is better at sex than most other people
- My partner would have doubts about his sexual competence (r)
- My partner would not feel very confident in sexual encounters (r)
- My partner would think of himself as a very good sexual partner
- My partner would rate himself low as a sexual partner (r)
- My partner would be confident about himself as a sexual partner
- My partner would not feel very confident in his sexual skill (r)
- My partner would doubt his sexual competence (r)



## Appendix B: Women's Anxiety About Partner

Please read each statement below and then indicate how true each statement is:

- | 1   | 2 | 3 | 4 | 5 | 6 | 7         |
|---|---|---|---|---|---|-----------|
| Not at all<br>true  |   |   |   |   |   | Very true |
| 1. I would feel anxious about hurting my partner's ego        |   |   |   |   |   |           |
| 2. I would feel stressed about my partner feeling embarrassed |   |   |   |   |   |           |
| 3. I would worry about my partner being upset                 |   |   |   |   |   |           |

### C.1: Global Precarious Manhood Beliefs.

Please read each statement below and then indicate how true *you personally* believe it is by selecting one number from the following scale:

1                      2                      3                      4                      5                      6                      7  
Not at all                                                                                                                                                                                              Very true  
true

1. It is fairly easy for a man to lose his status as a man.
2. A male's status as a 'real man' sometimes depends on how other people view him.
3. Some boys do not become men, no matter how old they get.
4. Other people often question whether a man is a 'real man'.
5. Manhood is something that can be taken away.
6. Manhood is not assured – it can be lost.
7. Manhood is not a permanent state, because a man might do something that suggests that he is really just a 'boy'.

### C.2: Sex-Specific Precarious Manhood Beliefs.

1. Most men would feel like less of a man if his partner didn't have an orgasm
2. Most men would feel embarrassed if his partner didn't have an orgasm
3. It is important to most men that he feels that he satisfies his partner in bed
4. Most men would be bothered if his partner corrected him in bed
5. If a partner were to give a man feedback in bed, it would hurt the mood
6. If a partner told a man she wanted him to change how he did something in bed, it would immediately bother him
7. Having skill in bed is seen as an important part of manhood
8. A man might be less happy with his sex life if his partner gave him constructive feedback
9. A couple's sex life would suffer if the man thought his partner wasn't fully satisfied in bed
10. A couple's sex life would suffer if the man thought what he did in bed wasn't good enough for her
11. If a man believed his partner wasn't satisfied in bed, it would hurt their relationship
12. If a man doesn't please his partner in bed, he would be seen as less of a man
13. Male virgins are not considered real men

## Appendix D: Women's Anxiety About Communication

Please read each statement below and then indicate how true each statement is:

1 2 3 4 5 6 7  
Not at all Very true  
true

- 1) It would worry me that giving my partner sexual feedback might hurt his feelings
- 2) I would feel anxious about telling partner I want him to do something different in bed
- 3) I would feel stress thinking about my partner's response to me telling him I don't like how he is doing something in bed

## **Appendix E: Women's Emotions About Self**

1. I would feel embarrassed about not having an orgasm.
2. I would feel ashamed about my inability to orgasm.
3. I would be disappointed in myself that I couldn't achieve an orgasm.

## Appendix F: Sexual Communication

Using the scale below, please indicate how likely you believe you would be in the described scenario to engage in the following behaviors.

1                                  2                                  3                                  4                                  5  
Not at all likely    Slightly Likely                  Uncertain                  Somewhat Likely                  Very Likely

1. Tell my partner I enjoyed our sexual encounter, even though I did not.
2. Show my partner what I need, for next time.
3. Tell my partner I had an orgasm, even though I had not.
4. Tell my partner I did not have an orgasm but that I didn't mind. *(not included in final measure)*
5. Tell my partner what I would need from him to achieve an orgasm, for next time.
6. Tell my partner having an orgasm is not important to my sexual satisfaction. *(not included in final measure)*

## Appendix G: Demographics

Please tell us a little about yourself.

*Note: For each of the questions below, we have tried to provide a number of category options. However, we recognize that these categories will not capture everyone's identities or characteristics. Therefore, for each question, we have also included an "other" option for you to use your own words to describe your identity if the categories provided do not capture your identity.*

1. What is your age? \_\_\_\_\_
  
2. How would you describe your race/ethnicity? Please select the one best descriptor, or use the "Biracial/Multiracial" option to specify further.
  - African/African American/Black
  - American Indian/Native American
  - Arab American/Middle Eastern
  - Asian/Asian American
  - Hispanic/Latina/o American
  - Pacific Islander
  - White/European American/Caucasian
  - Biracial/Multiracial (please specify): \_\_\_\_\_
  - Other (please specify): \_\_\_\_\_
  
3. What year are you in college?
  - Freshman
  - Sophomore
  - Junior
  - Senior
  - Fifth year
  - Other: \_\_\_\_\_
  
4. How would you identify your **current** social class? Please select the one best descriptor.
  - Lower class
  - Working class
  - Middle class
  - Upper middle class
  - Upper class
  - Other (please describe): \_\_\_\_\_
  
5. How would you identify your **family's** social class as you were growing up? Please select the one best descriptor.
  - Lower class
  - Working class
  - Middle class
  - Upper middle class
  - Upper class
  - Other (please describe): \_\_\_\_\_

6. How would you describe your religion?

- Judaism
- Christianity
- Islam
- Buddhism
- Hinduism
- Chinese Folk
- Tribal Religions
- Atheism
- Agnosticism
- None
- Other

If you indicated "other" in the question above, please indicate your religion below.

\_\_\_\_\_

7. How religious would you describe yourself?

- Not at all religious
- Slightly religious
- Moderately religious
- Very religious
- Extremely religious

## Appendix H: Qualifying Status Questionnaire

1. Do you identify as a heterosexual or bisexual woman?
  - a. Heterosexual
  - b. Bisexual
  - c. Neither
  
2. Are you currently in an **exclusive** romantic or sexual relationship?
  - a. Yes
  - b. No
  
3. Have you engaged in sexual activity with a man **in the last year**? Sexual activity is defined as anything you find arousing, excluding kissing and including (but not limited to) receiving manual stimulation from a partner, receiving oral stimulation (or oral sex) from a partner, vaginal intercourse, and/or anal intercourse.
  - a. Yes
  - b. No



## Appendix I: Gender Role Orientation

Please respond to the following statement: When it comes to the roles of men and women my beliefs are:

1	2	3	4	5
Very Traditional	Somewhat Traditional	Neither Traditional nor Untraditional	Somewhat Traditional	Not at all Traditional

1	2	3	4	5
Very Old Fashioned	Somewhat Old Fashioned	Neutral nor Untraditional	Somewhat Modern	Very Modern

1	2	3	4	5
Very Conservative	Somewhat Conservative	Moderate	Somewhat Progressive	Very Progressive

## Appendix J: Discomfort with Casual Sex

1. How acceptable do you feel it is to have sex in a new relationship?

1	2	3	4	5
Not at all acceptable	Slightly acceptable	Uncertain	Somewhat Likely	Very Likely

2. If women hook up or have sex with lots of people, I respect them less

1	2	3	4	5
Strongly Agree	Slightly Agree	Neither Agree nor Disagree	Slightly Disagree	Strongly Disagree

## Appendix K: Eating Disorder Inventory – Body Dissatisfaction Subscale

These questions measure a variety of attitudes, feelings, and behaviors. There are no right or wrong answers so please try to be completely honest in your answers. Read each question and circle the number of the word that best describes how YOU usually are.

1                      2                      3                      4                      5                      6  
Always              Usually              Often              Sometimes              Rarely              Never

	1	2	3	4	5	6
	Always	Usually	Often	Sometimes	Rarely	Never
1. I think that my stomach is too big.	1	2	3	4	5	6
2. I think that my thighs are too large.	1	2	3	4	5	6
3. I think that my stomach is just the right size.	1	2	3	4	5	6
4. I feel satisfied with the shape of my body.	1	2	3	4	5	6
5. I like the shape of my buttocks.	1	2	3	4	5	6
6. I think my hips are too big.	1	2	3	4	5	6
7. I think that my thighs are just the right size.	1	2	3	4	5	6
8. I think that my buttocks are too large.	1	2	3	4	5	6
9. I think that my hips are just the right size.	1	2	3	4	5	6

## Appendix L: IRB Approval



RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799  
(813) 974-5638 • FAX(813)974-7091

March 12, 2018

Jessica Jordan  
Psychology  
Tampa, FL 33637

RE: **Exempt Certification**  
IRB#: Pro00033735  
Title: Attitudes in Relationships

Dear Ms. Jordan:

On 3/12/2018, the Institutional Review Board (IRB) determined that your research meets criteria for exemption from the federal regulations as outlined by 45CFR46.101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:  
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

As the principal investigator for this study, it is your responsibility to ensure that this research is conducted as outlined in your application and consistent with the ethical principles outlined in the Belmont Report and with USF HRPP policies and procedures.

Please note, as per USF HRPP Policy, once the Exempt determination is made, the application is closed in ARC. Any proposed or anticipated changes to the study design that was previously declared exempt from IRB review must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant an amendment or new application.

Given the determination of exemption, this application is being closed in ARC. This does not limit your ability to conduct your research project.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have

any questions regarding this matter, please call 813-974-5638.

Sincerely,



Kristen Salomon, Ph.D., Vice Chairperson  
USF Institutional Review Board

## Appendix M: Informed Consent



### **Informed Consent to Participate in Research**

Information to Consider Before Taking Part in this Research Study

**Pro #** Pro00033735

Researchers at the University of South Florida (USF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study. We are asking you to take part in a research study that is called: Attitudes in Relationships. The person who is in charge of this research study is Jessica Jordan. This person is called the Principal Investigator.

### **Purpose of the Study**

The purpose of this study is to learn more about women's beliefs about men, how women communicate with their sexual partner, and how satisfied women are with their sexual relationships.

### **Why are you being asked to take part?**

We are asking you to take part in this research because you are a female between the ages of 18 and 24 and you are heterosexual or bisexual, not in an exclusive romantic relationship, and have been sexually active in the last year.

### **Study Procedures**

In this study you will be asked to take an online survey through Qualtrics. In this study you will read a vignette asking you to imagine a scenario. You will also be asked questions about your beliefs about men, your perceptions of your partner's feelings, how you communicate with your sexual partner, and some questions about your thoughts about yourself. Your participation is completely voluntary and your responses are completely anonymous.

### **Alternatives / Voluntary Participation / Withdrawal**

You should only take part in this study if you want to volunteer; you are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study.

### **Benefits and Risks**

You will receive no benefit from this study.  
This research is considered to be minimal risk.

### **Compensation**

Participation will take approximately 30 minutes. You receive 1 SONA point for participation in this study.

### **Privacy and Confidentiality**

We must keep your study records as confidential as possible. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online.

Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are: Jessica Jordan (Principal Investigator) and Joseph Vandello (advising professor), and the University of South Florida Institutional Review Board (IRB).

Please note that the data you provide may be collected and used by Amazon as per its privacy agreement. Additionally, this research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

No identifying information will be linked to your data. The data will be kept in a password-protected file, and only the principle investigator and research assistants assigned to this project will have access to it. We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are. It is possible, although unlikely, that unauthorized individuals could gain access to your responses. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this online survey involves risks similar to a person's everyday use of the Internet. If you complete and submit an anonymous survey and later request your data be withdrawn, this may or may not be possible as the researcher may be unable to extract anonymous data from the database.

### **Contact Information**

If you have any questions about your rights as a research participant, please contact the USF IRB at (813) 974-5638 or contact by email at [RSCH-IRB@usf.edu](mailto:RSCH-IRB@usf.edu). If you have questions regarding the research, please contact the Principal Investigator at [jjordan3@mail.usf.edu](mailto:jjordan3@mail.usf.edu).

We may publish what we learn from this study. If we do, we will not let anyone know your name. We will not publish anything else that would let people know who you are. You can print a copy of this consent form for your records.

I freely give my consent to take part in this study. I understand that by proceeding with this survey that I am agreeing to take part in research and I am 18 years of age or older.